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**C.C. JOHNSON & MALHOTRA, P.C.**

**PROGRESS REPORT #17  
APRIL 7, 1993**

ORIGINAL  
(Red)

**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

Clean Harbors removed Roll-off No. 2210 from the Snow Hill Lane Site on March 29, 1993. Roll-off No. 2210 contained a mixture of soil and kiln dust. Tom Pompa, a representative of the City of Baltimore, signed the roll-off manifest prior to removal.

All 24 overpack drums were scheduled to be removed from the site on March 29, 1993 as well. However, because of a large fuel spill in Virginia, no truck was available to remove the overpack drums. Clean Harbors was providing emergency response services at the fuel spill site. The overpack drum removal was to be rescheduled.

On the morning of March 30, 1993, R & R notified CCJM that Clean Harbors would be able to remove the remaining roll-offs and all drums from the Snow Hill Lane Site on March 31.

Clean Harbors removed Roll-off No. 3014, Roll-off No. 39190-22, the 24 overpack drums, and the seven drums of melt-water (from Roll-off No. 39190-22) from the Snow Hill Lane Site on March 31, 1993. Roll-off No. 3014 contained a mixture of soil and kiln dust. Roll-off No. 39190-22 contained crushed drums. Tom Pompa signed the manifests for the two roll-offs and the overpack drums and melt-water drums.

Clean Harbors removed Roll-off No. 2006 from the Snow Hill Lane Site on April 1, 1993. Roll-off No. 2006 contained a mixture of soil and kiln dust. Tom Pompa signed the manifest for the City of Baltimore.

CCJM has received post-removal, soil sample analysis data from RECRA Environmental, Inc. We are currently reviewing the data and will prepare a final report.

**2. PROJECTED ACTIVITIES**

CCJM will complete the review of the analytical data and will prepare a final report.

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April 7, 1993

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### 3. PROBLEMS ENCOUNTERED

The overpack drums could not be removed from the site on March 29, 1993 as scheduled. Clean Harbors did not have a truck available. Clean Harbors was conducting an emergency response at a fuel spill in Virginia.

The final roll-off could not be removed from the site on March 31, 1993. The Clean Harbors transport truck developed a flat tire.

### 4. MITIGATION OF PROBLEMS

The overpack drums were removed from the site on March 31, 1993.

The final roll-off (No. 2006) was removed from the site on April 1, 1993.

### 5. SCHEDULE

See No. 2 above.

### 6. ANALYTICAL DATA

Post-removal analytical data were received during this reporting period. We are currently reviewing the data.

### 7. MODIFICATIONS

No modifications were made during this reporting period.

**C.C. JOHNSON & MALHOTRA, P.C.**

ORIGINAL  
(Red)

**PROGRESS REPORT #16  
MARCH 24, 1993**

**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

Snow had accumulated in the soil-laden roll-off during the snowstorm which occurred March 12-14. R & R tried removing the snow on the morning of March 16 but it was frozen to the soil. CCJM halted this removal operation in favor of solidification to handle the snow-melt. In the afternoon Clean Harbors put new tarpaulins over the roll-offs.

Work was delayed on March 17-19 while Clean Harbors prepared to solidify the wet soil in the roll-offs. It was decided that kiln dust be used to solidify the wet soil.

Solidification of the wet soil began on March 22 and was completed on March 23. The addition of kiln dust to the soil in the roll-offs overloaded the roll-offs and necessitated the transfer of some of the soil from each roll-off to a third roll-off. The snow melt in the roll-off containing crushed empty drums was removed and drummed. The characterization of this drummed material is in process.

Representatives from CCJM, R & R, and Clean Harbors met with representatives from the City of Baltimore on March 22. The meeting was held to explain some of the problems and delays associated with the handling and transportation of contaminated materials from the site. Also at this meeting, it was decided that manifests can be signed by the on-site City inspectors.

**2. PROJECTED ACTIVITIES**

A tentative schedule includes:

Monday 3/29	Transport of drum and first soil-laden roll-off.
Thursday 4/1	Transport of second soil-laden roll-off.
Monday 4/5	Transport of third (final) soil-laden roll-off.
Thursday 4/8	Transport of empty drum roll-off.

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### 3. PROBLEMS ENCOUNTERED

The storm on March 12, 13 and 14 blew off the roll-off covers and filled the roll-offs with snow.

### 4. MITIGATION OF PROBLEMS

Soil in the roll-offs was solidified by intermixing kiln dust.

### 5. SCHEDULE

See No. 2 above.

### 6. ANALYTICAL DATA

No analytical data were received during this reporting period. We plan to receive analytical results from post-removal sampling during the last week of March.

### 7. MODIFICATIONS

We received EPA approval of the new disposal sites on March 24. This effectively changes the work plan by changing the destination of wastes from SCA Services to Clean Harbors of Braintree and Clean Harbors of Baltimore.

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**C.C. JOHNSON & MALHOTRA, P.C.**

**PROGRESS REPORT #15  
MARCH 10, 1993**

**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

On February 25; R & R, our removal subcontractor, over-packed drum contents and drums from area T-2.

We planned to begin excavation of area T-1 on February 26; however, due to heavy snow fall, R & R was not able to accomplish this. R & R however was able to crush some empty drums from the four drum areas which they placed in a roll-off.

R & R excavated area T-1 on March 1, however due to the muddy site conditions they were unable to haul the soil away. They stockpiled these soils in area T-1. R & R then began excavating and hauling soil to roll-offs from area T-4. Both areas were covered with poly at the end of the working day.

On March 2, R & R finished excavating and hauling soil from area T-4. By early afternoon this area was becoming impassable due to muddy conditions. At this point R & R moved to the garbage bag area where they excavated the area by hand.

We took samples from area T-4 on March 3. We had also planned to sample from the garbage area; however, an oily-sheen was present on the water which had ponded in the excavated area. We therefore decided that more soil should be excavated from this area before obtaining a sample. Also on March 3, R & R stripped the surface soils of area T-3 and began stripping the surface soils of area T-2. They also began backfilling area T-4 with clean fill.

Work was suspended on March 4 and 5 due to inclement weather. We scheduled to restart work on March 8.

On the morning of March 8, the backhoe was discovered to have a hydraulic leak which probably resulted from vandalism. R & R decided to begin work again the following day because another backhoe would not be available until mid-afternoon.

R & R finished stripping the surface soils of area T-2 on March 9. We took samples from

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areas T-3 and T-2. We also took soil samples from area T-1 after R & R had hauled away the remaining excavated soils from this area. Additionally, R & R completed backfilling area T-4 with clean fill and began backfilling area T-1. R & R also hand-excavated additional soil from the garbage bag area, after which we took a soil sample.

On March 10, R & R finished backfilling area T-1 with clean fill. After cleaning up the site, R & R decontaminated their backhoes and tools.

## 2. PROJECTED ACTIVITIES

Clean Harbors plans to transport the roll-offs and over pack barrels during the week of March 15.

## 3. PROBLEMS ENCOUNTERED

Poor site conditions attributed to inclement weather caused some delays. Vandalism also presented a problem manifesting itself in tampered equipment and destruction of material.

## 4. MITIGATION OF PROBLEMS

Poor site conditions were overcome by utilizing a track backhoe and four-wheel drive vehicles. Poor site conditions were also overcome by stabilizing some areas with crushed stone. Vandalism was partially deterred by placing a security guard at the site.

## 5. SCHEDULE

See No. 2 above.

## 6. ANALYTICAL DATA

No analytical data were received during this reporting period. We plan to receive analytical results from post-removal sampling during the last week of March.

## 7. MODIFICATIONS

We received approval of our proposal to grade and stabilize excavated areas at the Site prior to receipt of analytical results of post-removal sampling in a letter from the EPA dated February 26, 1993. This approval effectively changes the Work Plan by requiring that the excavated areas be covered with tarpaulins until post-removal sampling test results were obtained.

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March 10, 1993

**C.C. JOHNSON & MALHOTRA, P.C.**

**PROGRESS REPORT #13  
FEBRUARY 10, 1993**

ORIGINAL  
10-4

**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

We received approval from the EPA for the removal of contaminated soil and drums containing contaminated materials on February 8. Anticipating this approval, we met with a representative from our removal subcontractor, R & R International, at the site on February 5. We showed him the four drum areas and the garbage bag area. We also measured the areas where contaminated soils are planned to be removed. We have also been in contact with Glen Lapsley, EPA On Scene Coordinator (OSC), to gain access to a graveled roadway that leads southwest away from the site. This roadway was used in a previous cleanup activity conducted by the EPA. Mr. Lapsley stated that he did not foresee a problem with using the roadway; however, he did not have a key to the access gate. We questioned the City regarding this matter; however, we have yet to obtain a response.

**2. PROJECTED ACTIVITIES**

We will be staking the site by February 16. Our subcontractor, R & R, is scheduled to begin removal activities on February 22. Post-removal sampling will take place immediately after the contaminated soil is removed. Post-removal sampling will adhere to the original workplan and analysis will be conducted by RECRA Environmental. The pollutants which will be sampled for are included in the attached Table 1, Identified Priority Pollutants. This table represents pollutants found above background levels in the soil in drum areas T-1 and T-4. The table also represents pollutants found above background levels, and/or above Toxicity Characteristic Leachate Procedure (TCLP) regulatory limits, in the drum contents of areas T-1 and T-4. These findings were presented in Progress Reports #5 and #9. The samples taken will be a composition of surface soils taken at the four compass points at a distance of three-feet from the edge of each drum areas T-1 and T-4; and a composition of surface soils taken within each drum areas T-1 and T-4.

The contents of the garbage bag near the pond area were found to be contaminated as presented in Progress Report #4. As such, the garbage bag will be disposed of in the same manner of the soils and barrels.

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February 10, 1993

3. PROBLEMS ENCOUNTERED

No problems were encountered during this reporting period.

4. MITIGATION OF PROBLEMS

See No. 3 above.

5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

No analytical data were received during this reporting period. Furthermore, no data is pending.

7. MODIFICATIONS

We made no modification during this reporting period.



TABLE 1  
IDENTIFIED PRIORITY POLLUTANTS

February 10, 1993

DRUM GROUP	POLLUTANT
T-1	Chromium Lead Zinc Copper PCBs Ethyl benzene Toluene Di-n-butyl phthalate
T-4	Cyanide Cadmium Lead PCBs Ethyl benzene Benzene Toluene Napthalene Di-n-butyl phthalate bis (2-ethylhexyl) phthalate

**C.C. JOHNSON & MALHOTRA, P.C.**

**PROGRESS REPORT #12  
JANUARY 27, 1993**

ORIGINAL  
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**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

We are awaiting comments from the EPA regarding the second round of sampling and our corresponding recommendations in Progress Report #11. We have been in contact with R & R International who are awaiting our instructions regarding soil and barrel removal.

**2. PROJECTED ACTIVITIES**

Upon discussion with the EPA we will schedule the soil and barrel removal. Following the removal of all contaminated material, we will conduct post-removal sampling. These samples will be analyzed by RECRA Environmental, Inc., Columbia, Maryland, a laboratory participating in EPA's Contractor Laboratory Program.

**3. PROBLEMS ENCOUNTERED**

No problems were encountered during this reporting period.

**4. MITIGATION OF PROBLEMS**

See No. 3 above.

**5. SCHEDULE**

See No. 2 above.

**6. ANALYTICAL DATA**

No analytical data were received during this reporting period. Furthermore, no data is pending.

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Docket No. III-91-36-DC  
January 27, 1993

7. MODIFICATIONS

We made no modification during this reporting period.

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C.C. JOHNSON & MALHOTRA, P.C.

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PROGRESS REPORT #11  
JANUARY 13, 1993

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
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Which drums  
will be removed?  
TSD? ORIGINAL  
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1. PROGRESS TO DATE

We have reviewed the sampling results obtained from the final round of sampling. We also reviewed the results from the first round of sampling. Accordingly, we reviewed the appropriate regulations and publications regarding Action Levels and Regulatory Limits for soil remediation.

Our review of the appropriate regulations and publications included 40 CFR 264, the Toxic Substance Control Act (TSCA), and EPA's publication: "Determining Soil Response Action Levels Based on Potential Contaminant Migration to Ground Water: A Compendium of Examples". We first compared the results of the second round of sampling with the Action Levels found in the EPA publication and the TSCA. We then compared the results of the first round of sampling; as presented in Progress Report #4, October 9, 1992, with the Regulatory Limits found in 40 CFR 261.24.

Upon our review of the second round of sample results, it was found that none of the samples exceeded the action levels as put forth in the EPA publication (See Tables 1-5). Additionally, polychlorinated biphenyl (PCB) concentrations were all below the 50 parts per million (ppm) action level as put forth in the Toxic Substance Control Act (TSCA). Samples from this second round of sampling were taken from the four compass points, 3-feet from the perimeter of the area and at the center of the area at a depth of 12-inches. We therefore conclude that there is no actionable contamination associated with this second round of sampling.

Our review of the first round of sampling results reported in Progress Report # 4, October 9, 1992, showed a PCB concentration of 430 ppm in drum area T-4, which exceeds the TSCA action level. Our review also revealed that Lead TCLP concentrations in areas T-1 and T-4 were 10 ppm and 7.5 ppm respectively, which exceed the regulatory limit of 5 ppm as put forth in 40 CFR 261.24. These tested samples were a composite of surface soils taken within each drum area. We therefore conclude that actionable contamination exists in excess of soil action limits only on the surface soils within drum areas T-1 and T-4.

2. PROJECTED ACTIVITIES

Based on our conclusions we recommend that the soil within drum areas T-1 and T-4 should be removed to a depth of 1-foot. We hope to confer with you next week, after which we will schedule the soil and drum removal.

3. PROBLEMS ENCOUNTERED

We encountered no problems during this reporting period.

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(Red)

4. MITIGATION OF PROBLEMS

See No. 3 above.

5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

No analytical data was received during this report period. Furthermore, no data is pending.

7. MODIFICATIONS

We made no modifications during this reporting period.

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January 13, 1993

TABLE 1

COMPOUNDS DETECTED ABOVE BACKGROUND PRIORITY POLLUTANT LEVELS  
SAMPLE AREA: T1

JANUARY 13, 1993

AREA	PRIORITY POLLUTANT	SAMPLE CONC. (ppm)	BACKGROUND CONC. (ppm)	ACTION LEVEL* (ppm)
SOUTH	CHROMIUM	36	21	A
NORTH	LEAD	28	18	A
	ZINC	45	43	A
CENTER	COPPER	26	18	A
	LEAD	86	18	A
	ZINC	230	43	A

ppm = parts per million

MCL = Maximum Contaminant Level

\* See Discussion of Tables after Table 5

TABLE 2

COMPOUNDS DETECTED ABOVE BACKGROUND PRIORITY POLLUTANT LEVELS  
SAMPLE AREA: T2

JANUARY 13, 1993

AREA	PRIORITY POLLUTANT	SAMPLE CONC. (ppm)	BACKGROUND CONC. (ppm)	ACTION LEVEL* (ppm)
SOUTH	LEAD	19	18	A
	ZINC	48	43	A
NORTH	CHROMIUM (dup)	61	21	A
	COPPER	24	18	A
	LEAD (dup)	43	18	A
	MERCURY	0.41	0.13	A
	ZINC (dup)	110	43	A
EAST	CHROMIUM	42	21	A
	COPPER	22	18	A
	LEAD	28	18	A
	MERCURY	0.41	0.13	A
	ZINC	98	43	A
WEST	LEAD	21	18	A
	ZINC	57	43	A
CENTER	CHROMIUM	43	21	A
	LEAD	21	18	A
	MERCURY	0.21	0.13	A
	ZINC	66	43	A

ppm = parts per million

MCL = Maximum Contaminant Level

\* See Discussion of Tables after Table 5

TABLE 3

COMPOUNDS DETECTED ABOVE BACKGROUND PRIORITY POLLUTANT LEVELS  
SAMPLE AREA: T3

JANUARY 13, 1993

AREA	PRIORITY POLLUTANT	SAMPLE CONC. (ppm)	BACKGROUND CONC. (ppm)	ACTION LEVEL* (ppm)
SOUTH	CHROMIUM	24	21	A
	LEAD	24	18	A
	MERCURY	1.48	0.13	A
	ZINC	110	43	A
NORTH	TOLUENE	.1	ND	A
	ETHYLBENZENE	1.2	ND	A
	NAPHTHALENE	.710	ND	A
	PCBs	2	ND	A
	COPPER	32	18	A
	LEAD	50	18	A
	MERCURY	0.34	0.13	A
	ZINC	59	43	A
EAST	PCBs	9	ND	B
	CHROMIUM	56	21	A
	COPPER	73	18	A
	LEAD	140	18	A
	MERCURY	1.55	0.13	A
	ZINC	240	43	A
WEST	TOLUENE	0.600	ND	A
	ETHYLBENZENE	2.7	ND	A
	CYANIDE	0.3	0.2	A
	LEAD	27	18	A
	MERCURY	0.18	0.13	A
	ZINC	50	43	A
CENTER	LEAD	34	18	A
	ZINC	240	43	A

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(Red)

ppm = parts per million

MCL = Maximum Contaminant Level

ND = No Detect

\* See Discussion of Tables after Table 5

TABLE 4

COMPOUNDS DETECTED ABOVE BACKGROUND PRIORITY POLLUTANT LEVELS  
SAMPLE AREA: T4

JANUARY 13, 1993

AREA	PRIORITY POLLUTANT	SAMPLE CONC. (ppm)	BACKGROUND CONC. (ppm)	ACTION LEVEL* (ppm)
NORTH	CYANIDE	0.3	0.2	A
	CADMIUM	1.8	ND	A
	LEAD	43	18	A
WEST	PCBs	6	ND	B

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ppm = parts per million

MCL = Maximum Contaminant Level

ND = No Detect

\* See Discussion of Tables after Table 5

TABLE 5

COMPOUNDS DETECTED ABOVE BACKGROUND PRIORITY POLLUTANT LEVELS  
SAMPLE AREA: GARBAGE BAG

JANUARY 13, 1993

AREA	PRIORITY POLLUTANT	SAMPLE CONC. (ppm)	BACKGROUND CONC. (ppm)	ACTION LEVEL* (ppm)
NORTH	CADMIUM	1.6	ND	A
	LEAD	45	18	A

ppm = parts per million

MCL = Maximum Contaminant Level

ND = No Detect

\* See Discussion of Tables after Table 5



## DISCUSSION OF TABLES

ORIGINAL  
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**Level A:** This level represents approximate achievable analytical detection limits for organics compounds in soil, and natural background levels of metals and inorganic. For soils with constituents at or less than this level, the soils are considered uncontaminated. For residential land use, level A is the investigation standard.

For soil containing contaminants at concentrations greater than level A, but less than level B, the soil is considered slightly contaminated, but remediation is not required.

**Level B:** This level is an intermediate value, approximately 5 to 10 times above level A. For residential and recreational land use this level is the remediation standard, while for exclusive commercial or industrial land use it is the investigation standard.

For soil contaminants with concentrations exceeding level B, but less than level C, the soil is considered contaminated, and requires remediation to levels less than level B, if the land is used for residential or recreational purposes. Remediation will not be required if the land is used exclusively for commercial or industrial activities.

**Level C:** At this level, contamination of soil is significant. For exclusive commercial or industrial land use, level C is the remediation standard. For soils containing contaminants exceeding this level, all uses of the land will be restricted pending the application of appropriate remedial measures, which will reduce contaminant concentrations to levels less than level C.

**Taken from :** "Determining Soil Response Action Levels Based on Potential Contaminant Migration to Ground Water: A Compendium of Examples", EPA, October, 1989.

C.C. JOHNSON & MALHOTRA, P.C.

PROGRESS REPORT #10  
DECEMBER 30, 1992

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
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(Red)

1. PROGRESS TO DATE

We have been in review of the sampling results obtained from the final round of sampling. Accordingly, we are researching the appropriate regulations such as EPA's Soil Action Levels and the Toxic Substance Control Act (TSCA).

2. PROJECTED ACTIVITIES

Upon review of the appropriate regulations, we will discuss with the EPA the need for additional sampling and/or soil remediation activities. The scheduling of the barrel removal is pending on our discussion with the EPA.

3. PROBLEMS ENCOUNTERED

We encountered no problems during this reporting period.

4. MITIGATION OF PROBLEMS

See No. 3 above.

5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

No analytical data was received during this report period. Furthermore, no data is pending.

7. MODIFICATIONS

We made no modifications during this reporting period.

C.C. JOHNSON & MALHOTRA, P.C.

PROGRESS REPORT #9  
DECEMBER 16, 1992

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC

1. PROGRESS TO DATE

We have received the final analytical data for the second round of soil sampling from Gascoyne Laboratories, Inc. We conducted the second round of sampling on November 4 and 9, 1992. We have included the analytical results in Appendix A.

2. PROJECTED ACTIVITIES

We have received the analytical data from the third round of sampling. We are currently evaluating the need for further sampling. The plan for the third round of sampling may require modifications after this evaluation. The plan for the third round of sampling will be modified only after consultation with and approval from the City of Baltimore and the EPA Removal Enforcement Section. If no further sampling is required, we will schedule the drum and soil removal.

3. PROBLEMS ENCOUNTERED

We encountered no problems during this reporting period.

4. MITIGATION OF PROBLEMS

See No. 3 above.

5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

We received final analytical data during this reporting period for the sampling conducted on November 4 and 9, 1992. These data include the analyses of soil samples which we collected in and around the four drum groups and in the West Area. We collected five soil samples from each of the four drum groups (T-1, T-2, T-3, and T-4). These five samples included four perimeter

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samples and one sample from the center of the respective drum groups. We collected the perimeter samples at a distance of three feet from the respective drum groups. We collected every sample at a depth of one foot. We also collected one soil sample from beneath the garbage bag (GB-S2-C-12) in the West Area. We collected the sample at a depth of one foot. In addition to the aforementioned soil samples, we also collected two duplicate soil samples (T2-S2-3N-12 and GB-S2-C-12-D), two trip blank samples, and two field blank samples as part of the Quality Assurance/Quality Control (QA/QC) program.

Gascoyne Laboratories, Inc. analyzed the drum group soil samples for selected volatile organic compounds (VOCs), selected Base/Neutral compounds (B/Ns), PCB content, total cyanide, and selected metals. The selected VOCs included benzene, toluene, and ethyl benzene; the selected B/Ns included naphthalene, di-n-butyl phthalate, and bis (2-ethylhexyl) phthalate; and the selected metals included barium, cadmium, chromium, copper, lead, mercury, and zinc.

Gascoyne Laboratories, Inc. analyzed the West Area sample (beneath the garbage bag) for all B/Ns and for selected metals. The selected metals included arsenic, antimony, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.

We list below those compounds detected above background Priority Pollutant levels in each sample.

1. Sample T1-S2-3S-12, soil sample collected three feet south of drum group T-1.

Priority Pollutant

Metals:	chromium	36 ppm
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2. Sample T1-S2-3W-12, soil sample collected three feet west of drum group T-1.

Priority Pollutant

Metals:	lead	28 ppm
	zinc	45 ppm

3. Sample T1-S2-C-12, soil sample collected from center of drum group T-1.

Priority Pollutant

Metals:	copper	26 ppm
	lead	86 ppm
	zinc	230 ppm

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4. Sample T2-S2-3N-12, soil sample collected three feet north of drum group T-2.

Priority Pollutant

Metals:	chromium	32 ppm
	lead	22 ppm
	mercury	0.41 ppm
	zinc	66 ppm

5. Sample T2-S2-3N-12-D, duplicate soil sample collected three feet north of drum group T-2.

Priority Pollutant

Metals:	chromium	61 ppm
	copper	24 ppm
	lead	43 ppm
	mercury	0.32 ppm
	zinc	110 ppm

6. Sample T2-S2-3E-12, soil sample collected three feet east of drum group T-2.

Priority Pollutant

Metals:	chromium	42 ppm
	copper	22 ppm
	lead	28 ppm
	mercury	0.41 ppm
	zinc	98 ppm

7. Sample T2-S2-3S-12, soil sample collected three feet south of drum group T-2.

Priority Pollutant

Metals:	lead	19 ppm
	zinc	48 ppm

8. Sample T2-S2-3W-12, soil sample collected three feet west of drum group T-2.

Priority Pollutant

Metals:	lead	21 ppm
	zinc	57 ppm

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9. Sample T2-S2-C-12, soil sample collected from center of drum group T-2.

Priority Pollutant

Metals:	chromium	43 ppm
	lead	21 ppm
	mercury	0.21 ppm
	zinc	66 ppm

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(Red)

10. Sample T3-S2-3N-12, soil sample collected three feet north of drum group T-3.

Priority Pollutant

Volatiles:	toluene	100 ppb
	ethylbenzene	1200 ppb

Base/Neutrals:	naphthalene	710 ppb
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PCBs:		2 ppm
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Metals:	copper	32 ppm
	lead	50 ppm
	mercury	0.34 ppm
	zinc	59 ppm

11. Sample T3-S2-3E-12, soil sample collected three feet east of drum group T-3.

Priority Pollutant

PCBs:		9 ppm
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Metals:	chromium	56 ppm
	copper	73 ppm
	lead	140 ppm
	mercury	1.55 ppm
	zinc	240 ppm

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12. Sample T3-S2-3S-12, soil sample collected three feet south of drum group T-3.

Priority Pollutant

Metals:	chromium	24 ppm
	lead	24 ppm
	mercury	1.48 ppm
	zinc	110 ppm

ORIGINAL  
(Red)

13. Sample T3-S2-3W-12, soil sample collected three feet west of drum group T-3.

Priority Pollutant

Volatiles:	toluene	600 ppb
	ethylbenzene	2700 ppb

Total Cyanide:	0.3 ppm
----------------	---------

Metals:	lead	27 ppm
	mercury	0.18 ppm
	zinc	50 ppm

14. Sample T3-S2-C-12, soil sample collected from center of drum group T-3.

Priority Pollutant

Metals:	lead	34 ppm
	zinc	240 ppm

15. Sample T4-S2-3N-12, soil sample collected three feet north of drum group T-4.

Priority Pollutant

Total Cyanide:	0.3 ppm
----------------	---------

Metals:	cadmium	1.8 ppm
	lead	43 ppm

City of Baltimore  
Docket No. III-91-36-DC  
December 16, 1992

16. Sample T4-S2-3E-12, soil sample collected three feet east of drum group T-4.

ORIGINAL  
(Red)

Priority Pollutant

Total Cyanide: 0.4 ppm

Metals: cadmium 1.1 ppm

17. Sample T4-S2-3S-12, soil sample collected three feet south of drum group T-4.

Priority Pollutant

Metals: cadmium 1.8 ppm

18. Sample T4-S2-3W-12, soil sample collected three feet west of drum group T-4.

Priority Pollutant

PCBs: 6 ppm

Metals: cadmium 1.1 ppm  
lead 41 ppm  
mercury 0.40 ppm  
zinc 56 ppm

19. Sample T4-S2-C-12, soil sample collected from center of drum group T-4.

Priority Pollutant

Metals: cadmium 1.7 ppm  
mercury 0.51 ppm

20. Sample GB-S2-C-12, soil sample collected below garbage bag in West Area.

Priority Pollutant

Metals: cadmium 1.6 ppm  
lead 69 ppm  
selenium 0.3 ppm

City of Baltimore  
Docket No. III-91-36-DC  
December 16, 1992



21. Sample GB-S2-C-12-D, duplicate soil sample collected below garbage bag in West Area. *Amended (Red)*

Priority Pollutant

Metals:	cadmium	1.6 ppm
	lead	45 ppm

ppb = parts per billion

ppm = parts per million

We present the analytical data for background sample B-1 in Appendix B.

7. MODIFICATIONS

We made no modifications during this reporting period.

City of Baltimore  
Docket No. III-91-36-DC  
December 16, 1992

100  
(100)

APPENDIX A  
FINAL ANALYTICAL DATA  
SECOND SAMPLING ROUND  
SNOW HILL LANE SITE



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800

FAX NO.

(410) 633-6553

(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.


Page: 1 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Date Test Completed</u>
T1-S2-3N-12	11/04/92	ND	ND	ND	11/12/92
T1-S2-3E-12	11/04/92	ND	ND	ND	11/12/92
T1-S2-3S-12	11/04/92	ND	ND	ND	11/12/92
T1-S2-3W-12	11/04/92	ND	ND	ND	11/12/92
T1-S2-C-12	11/04/92	ND	ND	ND	11/12/92
T2-S2-3N-12	11/04/92	ND	ND	ND	11/12/92
T2-S2-3N-12-D	11/04/92	ND	ND	ND	11/12/92
T2-S2-3E-12	11/04/92	ND	ND	ND	11/12/92
T2-S2-3S-12	11/04/92	ND	ND	ND	11/12/92
T2-S2-3W-12	11/04/92	ND	ND	ND	11/16/92
T2-S2-C-12	11/04/92	ND	ND	ND	11/16/92
T3-S2-3E-12	11/04/92	ND	ND	*	11/16/92
T3-S2-3S-12	11/04/92	ND	ND	ND	11/16/92
T3-S2-C-12	11/04/92	ND	ND	ND	11/11/92
T4-S2-3N-12	11/09/92	ND	ND	ND	11/13/92
T4-S2-3E-12	11/09/92	ND	ND	ND	11/13/92
T4-S2-3S-12	11/09/92	ND	ND	ND	11/13/92
T4-S2-3W-12	11/09/92	ND	ND	ND	11/13/92
T4-S2-C-12	11/09/92	ND	ND	ND	11/13/92

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) \*-Detected below quantitation level.
- (4) Detection Limit = 13 for all compounds
- (5) Method(s): EPA 8260; Analyst(s): JLS/RC

  
William L. Lock  
Laboratory Director



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Please see reverse side for explanations and other information.



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Baltimore, MD 21224

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(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.


Page: 2 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Date Test Completed</u>
T3-S2-3N-12	11/04/92	ND	100	1200	11/16/92
T3-S2-3W-12	11/04/92	ND	600	2700	11/13/92

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Detection Limit = 60 for all compounds
- (4) Method(s): EPA 8260; Analyst(s): JLS/RC

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

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(410) 633-1800

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Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 3 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>Naphthalene</u>	<u>Di-n-butyl phthalate</u>	<u>Bis (2-ethylhexyl) phthalate</u>	<u>Date Test Completed</u>
T1-S2-3N-12	11/04/92	ND	3400 (4)	ND	11/10/92
T1-S2-3E-12	11/04/92	ND	3100 (4)	ND	11/10/92
T1-S2-3S-12	11/04/92	ND	3400 (4)	ND	11/10/92
T1-S2-3W-12	11/04/92	ND	1100 (5)	ND	11/17/92
T1-S2-C-12	11/04/92	ND	740 (5)	ND	11/17/92
T2-S2-3N-12	11/04/92	ND	ND	ND	11/17/92
T2-S2-3N-12-D	11/04/92	ND	470 (5)	ND	11/17/92
T2-S2-3E-12	11/04/92	ND	ND	ND	11/17/92
T2-S2-3S-12	11/04/92	ND	ND	ND	11/18/92
T2-S2-C-12	11/04/92	ND	ND	ND	11/18/92
T3-S2-3N-12	11/04/92	710	490 (5)	ND	11/17/92
T3-S2-3E-12	11/04/92	ND	ND	ND	11/17/92
T3-S2-3S-12	11/04/92	ND	ND	ND	11/17/92
T3-S2-3W-12	11/04/92	480	ND	ND	11/17/92
T3-S2-C-12	11/04/92	ND	ND	ND	11/18/92
T4-S2-3N-12	11/09/92	ND	2100 (6)	ND	11/16/92
T4-S2-3S-12	11/09/92	ND	2400 (7)	ND	11/13/92
T4-S2-3W-12	11/09/92	ND	ND	ND	11/13/92
T4-S2-C-12	11/09/92	ND	ND	ND	11/13/92

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Detection Limit = 400 for all compounds
- (4) This analyte was detected at 1000 ug/kg (ppb) in the calculated soil laboratory reagent blank.
- (5) This analyte was detected at 2000 ug/kg (ppb) in the calculated soil laboratory reagent blank.
- (6) This analyte was detected at 760 ug/kg (ppb) in the calculated soil laboratory reagent blank.
- (7) This analyte was detected at 620 ug/kg (ppb) in the calculated soil laboratory reagent blank.
- (8) Method(s): EPA 3550/8270, Analyst(s): DMJ

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

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(410) 633-1800

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(410) 633-6553

(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

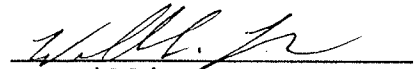
Page: 4 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>Naphthalene</u>	<u>Di-n-butyl phthalate</u>	<u>Bis (2-ethylhexyl) phthalate</u>	<u>Date Test Completed</u>
T2-S2-3W-12	11/04/92	ND	ND	ND	11/18/92
T4-S2-3E-12	11/09/92	ND	2700 (4)	ND	11/13/92

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Detection Limit = 500 for all compounds
- (4) This analyte was detected at 760 ug/kg (ppb) in the calculated soil laboratory reagent blank.
- (5) Method(s): EPA 3550/8270, Analyst(s): DMJ

  
William L. Lock  
Laboratory Director



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Baltimore, MD 21224

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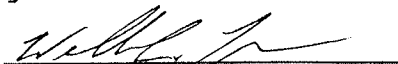
Page: 5 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>PCB Content</u>	<u>Detection Limits</u>
T1-S2-3N-12	11/04/92	ND	1
T1-S2-3E-12	11/04/92	ND	1
T1-S2-3S-12	11/04/92	ND	1
T1-S2-3W-12	11/04/92	ND	1
T1-S2-C-12	11/04/92	ND	2
T2-S2-3N-12	11/04/92	ND	1
T2-S2-3N-12-D	11/04/92	ND	1
T2-S2-3E-12	11/04/92	*	1
T2-S2-3S-12	11/04/92	ND	1
T2-S2-3W-12	11/04/92	ND	1
T2-S2-C-12	11/04/92	ND	1
T3-S2-3N-12	11/04/92	2	1
T3-S2-3E-12	11/04/92	9	1
T3-S2-3S-12	11/04/92	ND	1
T3-S2-3W-12	11/04/92	ND	1
T3-S2-C-12	11/04/92	ND	1
T4-S2-3N-12	11/09/92	ND	1
T4-S2-3E-12	11/09/92	ND	1
T4-S2-3S-12	11/09/92	ND	1
T4-S2-3W-12	11/09/92	6	1
T4-S2-C-12	11/09/92	ND	1

### Notes:

- (1) Results are expressed as milligrams/kilogram (ppm) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Analyses were performed according to EPA Method 3550/8080
- (4) Analyst(s): WW; Date Test Completed: 11/09/92, 11/10/92, 11/11/92
- (5) Detection Limits are expressed as per regulated aroclor.
- (6) \*-Detected below quantitation level.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
R-2

(410) 633-1800

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(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

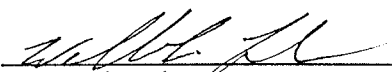
Page: 6 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003

	<u>Dated</u>	<u>Total Cyanide (CN)</u>
T1-S2-3N-12	11/04/92	ND
T1-S2-3E-12	11/04/92	ND
T1-S2-3S-12	11/04/92	ND
T1-S2-3W-12	11/04/92	ND
T1-S2-C-12	11/04/92	0.1
T2-S2-3N-12	11/04/92	ND
T2-S2-3N-12-D	11/04/92	ND
T2-S2-3E-12	11/04/92	ND
T2-S2-3S-12	11/04/92	ND
T2-S2-3W-12	11/04/92	ND
T2-S2-C-12	11/04/92	ND
T3-S2-3N-12	11/04/92	ND
T3-S2-3E-12	11/04/92	0.2
T3-S2-3S-12	11/04/92	ND
T3-S2-3W-12	11/04/92	0.3
T3-S2-C-12	11/04/92	ND
T4-S2-3N-12	11/09/92	0.3
T4-S2-3E-12	11/09/92	0.4
T4-S2-3S-12	11/09/92	ND
T4-S2-3W-12	11/09/92	ND
T4-S2-C-12	11/09/92	ND

### Notes:

- (1) Results expressed as mg/kg (ppm) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Detection Limit = 0.1
- (4) Analyses were performed according to EPA Method 335.3
- (5) Analyst(s): RGB; Date Test Completed: 11/17/92

  
William L. Lock  
Laboratory Director







# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800  
FAX NO.  
(410) 633-6553  
(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 7 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T1-S2-3N-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	ND	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	20	2	EPA 7190	RED	11/13/92
Copper (Cu)	8.7	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	14	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.11	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	40	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





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Baltimore, MD 21224

## REPORT OF ANALYSIS

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File  
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Report Date: December 2, 1992

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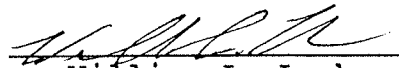
Page: 8 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T1-S2-3E-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	43	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	16	2	EPA 7190	RED	11/13/92
Copper (Cu)	7.6	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	ND	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.11	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	43	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
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Report No. 92-11-096

Report Date: December 2, 1992

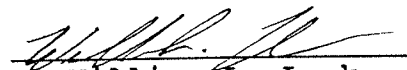
Report To: CC Johnson & Malhotra, P.C.

Page: 9 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T1-S2-3S-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	ND	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.5	EPA 7130	MMM	11/11/92
Chromium (Cr)	36	2	EPA 7190	RED	11/13/92
Copper (Cu)	3.1	0.5	EPA 7110	MMM	11/11/92
Lead (Pb)	ND	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	ND	0.05	EPA 7471	PDB	11/10/92
Zinc (Zn)	11	0.5	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



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Baltimore, MD 21224

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Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 10 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T1-S2-3W-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	38	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	15	2	EPA 7190	RED	11/13/92
Copper (Cu)	6.8	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	28	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.09	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	45	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800  
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(410) 633-6553  
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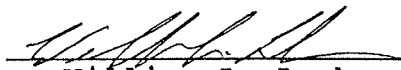
Page: 11 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T1-S2-C-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	32	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	19	2	EPA 7190	RED	11/13/92
Copper (Cu)	26	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	86	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	ND	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	230	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



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Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(11-1)

(410) 633-1800

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(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 12 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-3N-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	54	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	32	2	EPA 7190	RED	11/13/92
Copper (Cu)	16	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	22	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.41	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	66	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





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Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

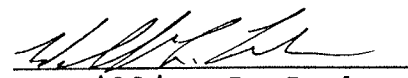
Page: 13 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-3N-12-D, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	59	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	61	2	EPA 7190	RED	11/13/92
Copper (Cu)	24	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	43	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.32	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	110	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director

ORIGINAL  
(Red)

APPENDIX B  
ANALYTICAL DATA  
BACKGROUND SAMPLE B-1  
FIRST ROUND SAMPLING  
SNOW HILL LANE SITE





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)  
(410) 633-1800  
FAX NO.  
(410) 633-6553  
(800) GAS-COYN

Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 8 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, B-1, dated 08/20/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Antimony (Sb)	ND	6	EPA 6010	FAK/JES	09/03/92
Arsenic (As)	4.9	0.3	EPA 7060	MMM	09/03/92
Beryllium (Be)	ND	3	EPA 6010	FAK/JES	09/03/92
Cadmium (Cd)	ND	0.6	EPA 6010	FAK/JES	09/03/92
Chromium (Cr)	21	3	EPA 6010	FAK/JES	09/03/92
Copper (Cu)	18	0.6	EPA 6010	FAK/JES	09/03/92
Lead (Pb)	18	3	EPA 6010	FAK/JES	09/03/92
Mercury (Hg)	0.13	0.06	EPA 7471	PDB	08/28/92
Nickel (Ni)	8	1	EPA 6010	FAK/JES	09/03/92
Selenium (Se)	ND	0.3	EPA 7740	JAD	09/10/92
Silver (Ag)	ND	0.6	EPA 6010	FAK/JES	09/03/92
Thallium (Tl)	ND	30	EPA 6010	FAK/JES	09/03/92
Zinc (Zn)	43	0.6	EPA 6010	FAK/JES	09/03/92

### Notes:

- (1) Results expressed as mg/kg (ppm) on a dry weight basis.
- (2) ND-Not Detected.

William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Res)

(410) 633-1800

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(800) GAS-COYN

Report No. 92-08-424

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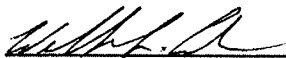
Page: 9 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, B-1, dated 08/20/92

<u>Volatiles</u>	<u>Results</u>	<u>Detection Limits</u>
Chloromethane	ND	26
Bromomethane	ND	26
Vinyl chloride	ND	26
Chloroethane	ND	26
Methylene chloride	ND	13
Acrolein	ND	260
Acrylonitrile	ND	260
Trichlorofluoromethane	ND	13
1,1-Dichloroethane	ND	13
1,2-Dichloroethene (4)	ND	13
Chloroform	ND	13
1,2-Dichloroethane	ND	13
1,1,1-Trichloroethane	ND	13
Carbon tetrachloride	ND	13
Bromodichloromethane	ND	13
1,2-Dichloropropane	ND	13
1,3-Dichloropropene (5)	ND	13
Dibromochloromethane	ND	13
1,1,2-Trichloroethane	ND	13
2-Chloroethylvinyl ether	ND	26
Bromoform	ND	13
Tetrachloroethene	ND	13
1,1,2,2-Tetrachloroethane	ND	13
Ethylbenzene	ND	13
1,1-Dichloroethene	ND	13
Trichloroethene	ND	13
Benzene	ND	13
Toluene	ND	13
Chlorobenzene	ND	13

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Analyses were performed according to EPA Method(s) 8260
- (4) Reported as the trans isomer(s).
- (5) Reported as the sum of cis and trans isomers.
- (6) Analyst(s): JMR/RC; Date Test Completed: 08/26/92

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 10 of 90

QA/QC Data: Snow Hill Lane Project, B-1

### ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS (TIC)

Number TICs found: 0

<u>CAS Number</u>	<u>Compound Name</u>	<u>Retention Time</u>	<u>Estimated Concentration</u>
-------------------	----------------------	-----------------------	--------------------------------

#### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) TIC's identified using computer aided library search of GC/MS NBS Library of Data generated by method EPA 8260
- (3) Analyst(s): RC/JMR; Date Test Completed: 08/26/92

  
Thomas A. McVicker  
QA/QC Officer





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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FAX NO.  
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Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.


Page: 11 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, B-1, dated 08/20/92

<u>Pesticides/PCB's</u>	<u>Results</u>	<u>Detection Limits</u>
a-BHC	ND	64
b-BHC	ND	64
g-BHC	ND	64
d-BHC	ND	64
Heptachlor	ND	64
Aldrin	ND	64
Heptachlor epoxide	ND	64
a-Endosulfan	ND	130
4,4'-DDE	ND	130
Dieldrin	ND	130
Endrin	ND	130
b-Endosulfan	ND	130
Endrin aldehyde	ND	390
4,4'-DDD	ND	390
Endosulfan sulfate	ND	390
4,4'-DDT	ND	390
PCB-1242	ND	1300
PCB-1254	ND	1300
PCB-1221	ND	1300
PCB-1232	ND	1300
PCB-1248	ND	1300
PCB-1260	ND	1300
PCB-1016	ND	1300
Chlordane	ND	1300
Toxaphene	ND	3900
Methoxychlor	ND	640

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Analyses were performed according to EPA Method(s) 3550/8080
- (4) Analyst(s): JMB; Date Test Completed: 09/02/92

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(200)

(410) 633-1800  
FAX NO.  
(410) 633-6553  
(800) GAS-COYN

Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 12 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, B-1, dated 08/20/92

### Acid Compounds

### Results

### Detection Limits


Phenol	ND	430
2-Chlorophenol	ND	430
2-Nitrophenol	ND	430
2,4-Dimethylphenol	ND	430
2,4-Dichlorophenol	ND	430
4-Chloro-3-methylphenol	ND	860
2,4,6-Trichlorophenol	ND	430
2,4-Dinitrophenol	ND	2100
4-Nitrophenol	ND	2100
4,6-Dinitro-2-methylphenol	ND	2100
Pentachlorophenol	ND	2100

### Base/Neutral Compounds

N-Nitrosodimethylamine	ND	430
bis(2-Chloroethyl) ether	ND	430
1,3-Dichlorobenzene	ND	430
1,4-Dichlorobenzene	ND	430
1,2-Dichlorobenzene	ND	430
bis(2-Chloroisopropyl) ether	ND	430
N-Nitrosodi-n-propylamine	ND	430
Hexachloroethane	ND	430
Nitrobenzene	ND	430
Isophorone	ND	430
bis(2-Chloroethoxy)methane	ND	430
1,2,4-Trichlorobenzene	ND	430
Naphthalene	ND	430
Hexachlorobutadiene	ND	430
Hexachlorocyclopentadiene	ND	430
2-Chloronaphthalene	ND	430
Dimethyl phthalate	ND	430
Acenaphthylene	ND	430

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Analyses were performed according to EPA Method(s) 3550/8270
- (4) Analyst(s): DMJ; Date Test Completed: 09/01/92

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800

FAX NO.

(410) 633-6553

(800) GAS-COYN

Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 13 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, B-1, dated 08/20/92

### Base/Neutral Compounds

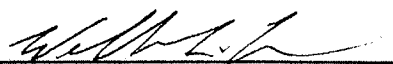
### Results

### Detection Limits

Acenaphthene	ND	430
2,4-Dinitrotoluene	ND	430
2,6-Dinitrotoluene	ND	430
Diethyl phthalate	ND	430
4-Chlorophenyl phenyl ether	ND	430
Fluorene	ND	430
N-Nitrosodiphenylamine (4)	ND	430
1,2-Diphenylhydrazine (5)	ND	430
4-Bromophenyl phenyl ether	ND	430
Hexachlorobenzene	ND	430
Phenanthrene	ND	430
Anthracene	ND	430
Di-n-butyl phthalate (7)	5200	430
Fluoranthene	ND	430
Pyrene	ND	430
Benzidine	ND	2100
Butylbenzyl phthalate (8)	1700	430
3,3'-Dichlorobenzidine	ND	860
Benzo(a)anthracene	ND	430
bis(2-Ethylhexyl) phthalate (9)	3300	430
Chrysene	ND	430
Di-n-octyl phthalate	ND	430
Benzo(b)fluoranthene	ND	430
Benzo(k)fluoranthene	ND	430
Benzo(a)pyrene	ND	430
Indeno(1,2,3-cd)pyrene	ND	430
Dibenz(a,h)anthracene	ND	430
Benzo(g,h,i)perylene	ND	430

### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) ND-Not Detected.
- (3) Analyses were performed according to EPA Method(s) 3550/8270
- (4) Cannot be separated from diphenylamine.
- (5) Detected as azobenzene.
- (6) Analyst(s): DMJ; Date Test Completed: 09/01/92
- (7) Detected 500 µg/kg (ppb) of this analyte in the soil method blank.
- (8) Detected 450 µg/kg(ppb) of this analyte in the soil method blank.
- (9) Detected 1000 µg/kg(ppb) of this analyte in the soil method blank.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

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Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

Page: 14 of 90

QA/QC Data: Snow Hill Lane Project, B-1


### ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS (TIC)

Number TICs found: 13

<u>CAS Number</u>	<u>Compound Name</u>	<u>Retention Time</u>	<u>Estimated Concentration</u>
3102338	3-Pentene-2-one	4.54	750
57556	1,2-Propanediol	4.90	7300
25044013	2-Methyl-1-penten-3-one	5.17	1100
-	Unknown	5.39	840
-	Unknown	6.41	2400
57103	Hexadecanoic acid	27.01	660
-	Unknown	35.37	540
-	Unknown	37.16	2400
-	Unknown	38.94	2600
-	Unknown	39.66	2400
-	Unknown	40.88	1400
-	Unknown	43.02	820
-	Unknown	44.82	770

#### Notes:

- (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.
- (2) TIC's identified using computer aided library search of GC/MS NBS Library of Data generated by method EPA 3550/8270
- (3) Analyst(s): DMJ; Date Test Completed: 09/01/92

  
Thomas A. McVicker  
QA/QC Officer





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800  
FAX NO.  
(410) 633-6553  
(800) GAS-COYN

Report No. 92-08-424

Report Date: October 2, 1992

Report To: CC Johnson & Malhotra, P.C.

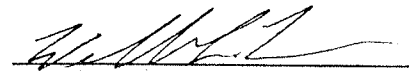
Page: 56 of 90

Sample I.D. Submitted Soil: Snow Hill Lane Project, dated 08/20/92

### Total Cyanide (CN)

B-1	0.2
GB-1	0.3
GB-1 Duplicate	0.2

- Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) Detection Limit = 0.1  
(3) Method(s): EPA 335.3;  
Analyst(s): RJG;  
Date Test Completed: 09/01/92

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc. ORIGINAL (Red)

Baltimore, MD 21224

## REPORT OF ANALYSIS

(410) 633-1800

FAX NO.

(410) 633-6553

(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

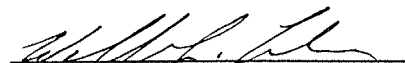
Page: 14 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-3E-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	65	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	42	2	EPA 7190	RED	11/13/92
Copper (Cu)	22	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	28	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.41	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	98	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
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(410) 633-1800  
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Report No. 92-11-096

Report Date: December 2, 1992

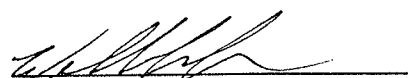
Report To: CC Johnson & Malhotra, P.C.

Page: 15 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-3S-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	62	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	16	2	EPA 7190	RED	11/13/92
Copper (Cu)	12	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	19	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.09	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	48	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)  
  
(410) 633-1800  
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Report No. 92-11-096

Report Date: December 2, 1992

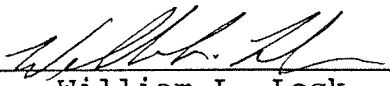
Report To: CC Johnson & Malhotra, P.C.

Page: 16 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-3W-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	48	30	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.7	EPA 7130	MMM	11/11/92
Chromium (Cr)	20	3	EPA 7190	RED	11/13/92
Copper (Cu)	11	0.7	EPA 7110	MMM	11/11/92
Lead (Pb)	21	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.09	0.07	EPA 7471	PDB	11/10/92
Zinc (Zn)	57	7	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





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Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
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Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

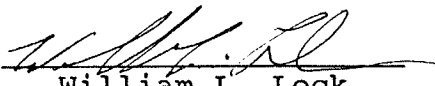
Page: 17 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T2-S2-C-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	44	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	43	2	EPA 7190	RED	11/13/92
Copper (Cu)	11	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	21	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.21	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	66	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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(410) 633-1800  
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Report No. 92-11-096

Report Date: December 2, 1992

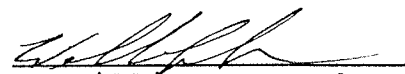
Report To: CC Johnson & Malhotra, P.C.

Page: 18 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T3-S2-3N-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	73	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	17	2	EPA 7190	RED	11/13/92
Copper (Cu)	32	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	50	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.34	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	59	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.


Page: 19 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T3-S2-3E-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	89	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	56	2	EPA 7190	RED	11/13/92
Copper (Cu)	73	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	140	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	1.55	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	240	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(P. 1)

(410) 633-1800

FAX NO.

(410) 633-6553

(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

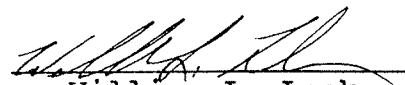
Page: 20 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T3-S2-3S-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	99	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	24	2	EPA 7190	RED	11/13/92
Copper (Cu)	16	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	24	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	1.48	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	110	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800  
FAX NO.  
(410) 633-6553  
(800) GAS-COYN

Report No. 92-11-096

Report Date: December 2, 1992

Report To: CC Johnson & Malhotra, P.C.

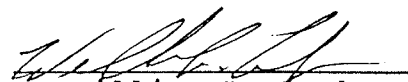
Page: 21 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T3-S2-3W-12, dated 11/04/92

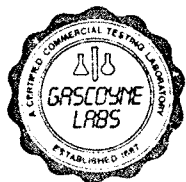
	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	82	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	14	2	EPA 7190	RED	11/13/92
Copper (Cu)	14	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	27	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.18	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	50	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

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Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 22 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T3-S2-C-12, dated 11/04/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	62	20	EPA 7080	RED	11/12/92
Cadmium (Cd)	ND	0.6	EPA 7130	MMM	11/11/92
Chromium (Cr)	14	2	EPA 7190	RED	11/13/92
Copper (Cu)	15	0.6	EPA 7110	MMM	11/11/92
Lead (Pb)	34	10	EPA 7420	MMM	11/11/92
Mercury (Hg)	0.12	0.06	EPA 7471	PDB	11/10/92
Zinc (Zn)	260	6	EPA 7950	MMM	11/11/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

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Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 23 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T4-S2-3N-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	95	0.6	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.8	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	19	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	15	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	43	3.0	EPA 200.7	JES	11/17/92
Mercury (Hg)	0.13	0.06	EPA 7471	PDB	11/13/92
Zinc (Zn)	42	0.6	EPA 200.7	JES	11/17/92

Note: Results expressed as mg/kg (ppm) on a dry weight basis.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc. ORIGINAL (Red)

Baltimore, MD 21224

## REPORT OF ANALYSIS

(410) 633-1800

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Report No. 92-11-096

Report Date: December 2, 1992

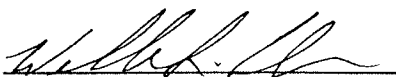
Report To: CC Johnson & Malhotra, P.C.

Page: 24 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T4-S2-3E-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	85	0.6	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.1	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	17	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	11	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	16	3.0	EPA 200.7	JES	11/17/92
Mercury (Hg)	0.09	0.06	EPA 7471	PDB	11/13/92
Zinc (Zn)	34	0.6	EPA 200.7	JES	11/17/92

Note: Results expressed as mg/kg (ppm) on a dry weight basis.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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(Red)

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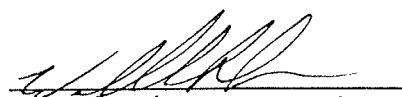
Report To: CC Johnson & Malhotra, P.C.

Page: 25 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T4-S2-3S-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	110	0.6	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.8	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	15	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	16	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	14	3.0	EPA 200.7	JES	11/17/92
Mercury (Hg)	0.12	0.06	EPA 7471	PDB	11/13/92
Zinc (Zn)	36	0.6	EPA 200.7	JES	11/17/92

Note: Results expressed as mg/kg (ppm) on a dry weight basis.

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800

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Report No. 92-11-096

Report Date: December 2, 1992

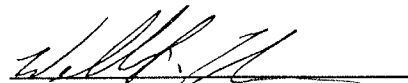
Report To: CC Johnson & Malhotra, P.C.

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Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T4-S2-3W-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	73	0.6	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.1	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	18	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	13	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	41	3.0	EPA 200.7	JES	11/17/92
Mercury (Hg)	0.40	0.06	EPA 7471	PDB	11/13/92
Zinc (Zn)	56	0.6	EPA 200.7	JES	11/17/92

Note: Results expressed as mg/kg (ppm) on a dry weight basis.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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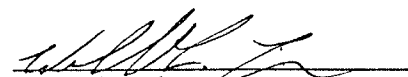
Report To: CC Johnson & Malhotra, P.C.

Page: 27 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
T4-S2-C-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Barium (Ba)	111	0.6	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.7	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	17	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	18	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	16	3.0	EPA 200.7	JES	11/17/92
Mercury (Hg)	0.15	0.06	EPA 7471	PDB	11/13/92
Zinc (Zn)	42	0.6	EPA 200.7	JES	11/17/92

Note: Results expressed as mg/kg (ppm) on a dry weight basis.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 28 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
GB-S2-C-12, dated 11/09/92

<u>Base/Neutral Compounds</u>	<u>Results</u>	<u>Detection Limits</u>
N-Nitrosodimethylamine	ND	370
bis(2-Chloroethyl) ether	ND	370
1,3-Dichlorobenzene	ND	370
1,4-Dichlorobenzene	ND	370
1,2-Dichlorobenzene	ND	370
bis(2-Chloroisopropyl) ether	ND	370
N-Nitrosodi-n-propylamine	ND	370
Hexachloroethane	ND	370
Nitrobenzene	ND	370
Isophorone	ND	370
bis(2-Chloroethoxy)methane	ND	370
1,2,4-Trichlorobenzene	ND	370
Naphthalene	ND	370
Hexachlorobutadiene	ND	370
Hexachlorocyclopentadiene	ND	370
2-Chloronaphthalene	ND	370
Dimethyl phthalate	ND	370
Acenaphthylene	ND	370

- Notes: (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.  
(2) ND-Not Detected.  
(3) Analyses were performed according to EPA Method(s) 3550/8270  
(4) Analyst(s): DMJ; Date Test Completed: 11/19/92

  
William L. Lock  
Laboratory Director





# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
(Red)

(410) 633-1800

FAX NO.

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Report No. 92-11-096

Report Date: December 2, 1992

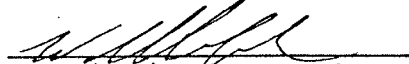
Report To: CC Johnson & Malhotra, P.C.

Page: 29 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
GB-S2-C-12, dated 11/09/92

<u>Base/Neutral Compounds</u>	<u>Results</u>	<u>Detection Limits</u>
Acenaphthene	ND	370
2,4-Dinitrotoluene	ND	370
2,6-Dinitrotoluene	ND	370
Diethyl phthalate	ND	370
4-Chlorophenyl phenyl ether	ND	370
Fluorene	ND	370
N-Nitrosodiphenylamine (4)	ND	370
1,2-Diphenylhydrazine (5)	ND	370
4-Bromophenyl phenyl ether	ND	370
Hexachlorobenzene	ND	370
Phenanthrene	ND	370
Anthracene	ND	370
Di-n-butyl phthalate	ND	370
Fluoranthene	ND	370
Pyrene	ND	370
Benzidine	ND	1800
Butylbenzyl phthalate	ND	370
3,3'-Dichlorobenzidine	ND	730
Benzo(a)anthracene	ND	370
bis(2-Ethylhexyl) phthalate	ND	370
Chrysene	ND	370
Di-n-octyl phthalate	ND	370
Benzo(b)fluoranthene	ND	370
Benzo(k)fluoranthene	ND	370
Benzo(a)pyrene	ND	370
Indeno(1,2,3-cd)pyrene	ND	370
Dibenz(a,h)anthracene	ND	370
Benzo(g,h,i)perylene	ND	370

- Notes: (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.  
(2) ND-Not Detected.  
(3) Analyses were performed according to EPA Method(s) 3550/8270  
(4) Cannot be separated from diphenylamine.  
(5) Detected as azobenzene.  
(6) Analyst(s): DMJ; Date Test Completed: 11/19/92

  
William L. Lock  
Laboratory Director







# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

ORIGINAL  
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Report No. 92-11-096

Report Date: December 2, 1992

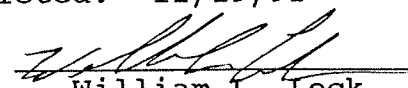
Report To: CC Johnson & Malhotra, P.C.

Page: 31 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
GB-S2-C-12-D, dated 11/09/92

<u>Base/Neutral Compounds</u>	<u>Results</u>	<u>Detection Limits</u>
Acenaphthene	ND	370
2,4-Dinitrotoluene	ND	370
2,6-Dinitrotoluene	ND	370
Diethyl phthalate	ND	370
4-Chlorophenyl phenyl ether	ND	370
Fluorene	ND	370
N-Nitrosodiphenylamine (4)	ND	370
1,2-Diphenylhydrazine (5)	ND	370
4-Bromophenyl phenyl ether	ND	370
Hexachlorobenzene	ND	370
Phenanthrene	ND	370
Anthracene	ND	370
Di-n-butyl phthalate	ND	370
Fluoranthene	ND	370
Pyrene	ND	370
Benzidine	ND	1800
Butylbenzyl phthalate	ND	370
3,3'-Dichlorobenzidine	ND	730
Benzo(a)anthracene	ND	370
bis(2-Ethylhexyl) phthalate	ND	370
Chrysene	ND	370
Di-n-octyl phthalate	ND	370
Benzo(b)fluoranthene	ND	370
Benzo(k)fluoranthene	ND	370
Benzo(a)pyrene	ND	370
Indeno(1,2,3-cd)pyrene	ND	370
Dibenz(a,h)anthracene	ND	370
Benzo(g,h,i)perylene	ND	370

- Notes: (1) Results expressed as micrograms/kilogram (ppb) on a dry weight basis.  
(2) ND-Not Detected.  
(3) Analyses were performed according to EPA Method(s) 3550/8270  
(4) Cannot be separated from diphenylamine.  
(5) Detected as azobenzene.  
(6) Analyst(s): DMJ; Date Test Completed: 11/19/92

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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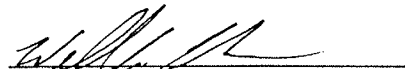
Page: 32 of 33

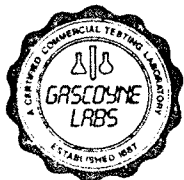
Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
GB-S2-C-12, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Arsenic (As)	2.2	0.3	EPA 7060	JAD	11/13/92
Antimony (Sb)	ND	6.0	EPA 200.7	JES	11/17/92
Beryllium (Be)	ND	0.3	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.6	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	16	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	11	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	69	3.0	EPA 200.7	JES	11/25/92
Mercury (Hg)	0.09	0.05	EPA 7471	PDB	11/16/92
Nickel (Ni)	3	1	EPA 7520	MMM	11/18/92
Selenium (Se)	0.3	0.3	EPA 7740	JAD	11/13/92
Silver (Ag)	ND	0.5	EPA 7760	MMM	11/17/92
Thallium (Tl)	ND	6.0	EPA 200.7	JES	11/17/92
Zinc (Zn)	23	0.6	EPA 200.7	JES	11/17/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.

(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director



# Gascoyne Laboratories, Inc.

Baltimore, MD 21224

## REPORT OF ANALYSIS

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Report No. 92-11-096

Report Date: December 2, 1992


Report To: CC Johnson & Malhotra, P.C.

Page: 33 of 33

Sample I.D. Submitted Soil: Snow Hill Lane Project, No. 662-071-00003,  
GB-S2-C-12-D, dated 11/09/92

	<u>Results</u>	<u>Detection Limits</u>	<u>Method</u>	<u>Analyst</u>	<u>Date Test Completed</u>
Arsenic (As)	1.8	0.3	EPA 7060	JAD	11/13/92
Antimony (Sb)	ND	6.0	EPA 200.7	JES	11/17/92
Beryllium (Be)	ND	0.3	EPA 200.7	JES	11/17/92
Cadmium (Cd)	1.6	0.6	EPA 200.7	JES	11/17/92
Chromium (Cr)	18	3.0	EPA 200.7	JES	11/17/92
Copper (Cu)	10	0.6	EPA 200.7	JES	11/17/92
Lead (Pb)	45	3.0	EPA 200.7	JES	11/25/92
Mercury (Hg)	0.08	0.05	EPA 7471	PDB	11/16/92
Nickel (Ni)	3	1	EPA 7520	MMM	11/18/92
Selenium (Se)	ND	0.3	EPA 7740	JAD	11/13/92
Silver (Ag)	ND	0.5	EPA 7760	MMM	11/17/92
Thallium (Tl)	ND	6.0	EPA 200.7	JES	11/17/92
Zinc (Zn)	21	0.6	EPA 200.7	JES	11/17/92

Notes: (1) Results expressed as mg/kg (ppm) on a dry weight basis.  
(2) ND-Not Detected.

  
William L. Lock  
Laboratory Director

C.C. JOHNSON & MALHOTRA, P.C.

PROGRESS REPORT #8  
DECEMBER 2, 1992

ORIGINAL  
(Red)

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC

1. PROGRESS TO DATE

We completed the second round of sampling on November 9, 1992. We are awaiting receipt of laboratory analytical data from Gascoyne Laboratories.

2. PROJECTED ACTIVITIES

When we receive the laboratory results from the second round of sampling, we will evaluate the results and determine the need for a third round of sampling. It is anticipated that we will receive the results during the week of December 7, 1992. We have scheduled the third round of sampling, if necessary, for the week of December 14, 1992. If no further sampling is required, we will schedule the drum and soil removal.

3. PROBLEMS ENCOUNTERED

We encountered no problems during this reporting period.

4. MITIGATION OF PROBLEMS

See No. 3 above.

5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

We received no analytical data during this reporting period.

City of Baltimore  
Docket No. III-91-36-DC  
December 2, 1992

7. MODIFICATIONS

We made no modifications during this reporting period.

ORIGINAL  
(Red)

City of Baltimore  
Docket No. III-91-36-DC  
December 2, 1992

C.C. JOHNSON & MALHOTRA, P.C.

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PROGRESS REPORT #7  
NOVEMBER 18, 1992

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC

1. PROGRESS TO DATE

We completed the second round of sampling on November 9, 1992. We collected five soil samples from each of the drum areas as follows:

<u>Drum Areas</u>	<u>Date</u>
T-1, T-2, and T-3	November 4, 1992
T-4	November 9, 1992

On November 9, 1992, we also collected one soil sample from beneath the garbage bag at the West Area. We delivered all soil samples to Gascoyne Laboratories, Inc. for analysis.

2. PROJECTED ACTIVITIES

When we receive the laboratory results from the second round of sampling, we will evaluate the results and determine the need for a third round of sampling. It is anticipated that we will receive the results during the week of December 7, 1992. We have scheduled the third round of sampling, if necessary, for the week of December 14, 1992. If no further sampling is required, we will schedule the drum and soil removal.

3. PROBLEMS ENCOUNTERED

We encountered no problems during this reporting period.

4. MITIGATION OF PROBLEMS

We encountered no problems during this reporting period.

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5. SCHEDULE

See No. 2 above.

6. ANALYTICAL DATA

We received no analytical data during this reporting period.

7. MODIFICATIONS

We made no modifications during this reporting period.

C.C. JOHNSON & MALHOTRA, P.C.

**PROGRESS REPORT #5  
OCTOBER 22, 1992**

**CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC**

**1. PROGRESS TO DATE**

The first round of sampling as described in the Work Plan was completed on September 10, 1992. CCJM has received final analytical results from Gascoyne Laboratories, Inc. for the sampling conducted on August 20 and 21; and preliminary analytical results for the sampling conducted on September 9 and 10, 1992. These results were evaluated to compile the enclosed proposed sampling plan (Appendix A) for the second round of sampling. Modifications to this plan will be made, if needed, upon receipt of final data. Laboratory results are included as Appendices B and C.

**2. PROJECTED ACTIVITIES**

It is anticipated that the additional final data will be received the week of October 26, 1992. The second round of sampling has been tentatively scheduled for November 3 and 4, 1992. This second round of sampling will include vertical and horizontal soil samples to determine the extent of contamination. Soil samples will be obtained from the center of each drum area and from four perimeter locations at a distance of approximately three feet from the edge of each drum group at a depth of 12 inches. In addition, one vertical soil sample will be collected from under the garbage bag located in the West Area. As described in the Work Plan, soil samples from the drum areas will be analyzed for Priority Pollutant volatiles, acid compounds and base neutrals identified during the first round of sampling, plus chromium, copper, lead, zinc, PCBs and cyanide. The soil sample taken under the garbage bag in the West Area will be analyzed for priority pollutants identified during the first round of sampling.

**3. PROBLEMS ENCOUNTERED**

A delay was encountered in the receipt of laboratory data from Gascoyne Laboratories, Inc.

**4. MITIGATION OF PROBLEMS**

Sampling was re-scheduled to allow time for receipt and evaluation of data.



## 5. SCHEDULE

See No. 2 above.

## 6. ANALYTICAL DATA

Preliminary analytical data were received during this reporting period for the sampling conducted on September 9 and 10, 1992. These data include the analyses of liquid and solid drum contents. All solid samples were analyzed for Priority Pollutant volatiles, acid compounds and base neutrals; and for disposal parameters, including Toxicity Characteristic Leachate Procedure (TCLP), ignitability, corrosivity, reactivity and PCBs. The liquid composite sample was also analyzed for these parameters. This sample separated into two layers; layers were analyzed individually for some parameters. The liquid sample from drum T-1-2 was analyzed only for TCLP due to limited sample volume. Substances detected above background Priority Pollutant levels in each sample are listed below. Subsequent soil samples will be analyzed for the identified priority pollutants to determine the extent of clean-up required. Substances detected by the TCLP are also shown below. These results will be used to determine the disposal requirements for drums and contaminated soils.

1. Sample L-1, composite of liquid from Drum Groups T-2 and T-4 (no liquid was present in Group T-3).

### Priority pollutants

Volatiles:	ethyl benzene	5900 ppb
	benzene	700 ppb
	toluene	1500 ppb

Base neutrals:	naphthalene	610 ppb (bottom layer)
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### Disposal parameters

TCLP volatiles:	benzene	92 ppm (top layer)*
	benzene	0.64 ppm (bottom layer)*
	methyl ethyl ketone	27 ppm (bottom layer)

TCLP Metals:	Lead	0.5 ppm
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Ignitability:	Positive
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2. Sample T-1-2, liquid from drum in Group T-1

### Disposal Parameters

TCLP Metals:	Cadmium	0.09 ppm
	Chromium	16 ppm*

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## 3. Sample T-1, solid composite from Drum Group T-1

**Priority pollutants**

Volatiles:	Ethyl benzene	660 ppb
	Toluene	390 ppb

Base neutrals:	Di-n-butyl phthalate	50,000 ppb
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**Disposal parameters**

TCLP metals:	Cadmium	0.6 ppm
	Chromium	0.1 ppm
	Lead	59 ppm*

PCBs:	290 ppm
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## 4. Sample T-2, solid composite from Drum Group T-2

**Disposal parameters**

TCLP metals:	Cadmium	0.05 ppm
	Lead	0.9 ppm

## 5. Sample T-3, solid composite from Drum Group T-3

**Disposal parameters**

TCLP metals:	Cadmium	0.04 ppm
	Lead	0.6 ppm

## 6. Sample T-4, solid composite from Drum Group T-4

**Priority pollutants**

Volatiles:	Ethyl benzene	90 ppb
	Toluene	130 ppb

Base Neutrals:	Di-n-butyl phthalate	10,000 ppb
	bis(2-ethylhexyl) phthalate	20,000 ppb

**Disposal parameters**

TCLP metals:	Cadmium	0.2 ppm
	Lead	4.4 ppm*
	PCBs:	25 ppm

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ppb = parts per billion  
ppm = parts per million

\*Exceeds TCLP Regulatory Levels

A proposed sampling plan, based on these results and the results discussed in Progress Report #4, is included as Appendix A.

**7. MODIFICATIONS**

No modifications were made during this reporting period.

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APPENDIX A  
PROPOSED SAMPLING PLAN  
SECOND SAMPLING ROUND  
SNOW HILL LANE SITE

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PROPOSED SAMPLING PLAN  
SECOND SAMPLING ROUND  
SNOW HILL LANE SITE

SAMPLE LOCATION	DESCRIPTION	ANALYSES
Each of four drum areas	4 perimeter samples at a distance of 3 feet at a depth of 12 inches	ethyl benzene benzene toluene di-n-butyl phthalate bis(2-ethylhexyl)phthalate naphthalene Chromium, copper, lead, zinc PCBs Cyanide
West area	Beneath garbage bag at a depth of 12 inches	Priority pollutant base neutrals and metals

C.C. JOHNSON & MALHOTRA, P.C.

PROGRESS REPORT #4  
OCTOBER 9, 1992

CITY OF BALTIMORE  
SNOW HILL LANE SITE  
DOCKET NO. III-91-36-DC

1. PROGRESS TO DATE

The first round of sampling as described in the Work Plan was completed on September 10, 1992. CCJM has received preliminary and partial analytical results from Gascoyne Laboratories, Inc. Evaluation of these laboratory results and forthcoming final analytical results will determine the complete scope of work for the second round of sampling.

2. PROJECTED ACTIVITIES

Upon receipt of complete laboratory results from the first round of sampling, data will be further evaluated to define the scope of work and laboratory analyses for the second round of sampling. It is anticipated that the additional data will be received at the beginning of the week of October 12, 1992 and that the second round of sampling will be scheduled for the latter half of the same week. This second round of sampling will include vertical and horizontal soil samples to determine the extent of contamination. Sample testing parameters will be determined after receipt of complete analytical results from the first round of sampling. Soil samples will be obtained from the center of each drum area and from four perimeter locations at a distance of approximately three feet from the edge of each drum group at a depth of 12 inches. In addition, one vertical soil sample will be collected from under the garbage bag located in the West Area. Based on the preliminary results, this soil sample will be analyzed for Priority Pollutant metals, base/neutral compounds (BNs), and phenol 4-AAP. A number of metals (lead in particular), a number of BNs, and phenol 4-AAP were present above the limits of detection in the garbage bag sample. No soil samples will be collected from the perimeter of the pond in the West Area. Analysis of two pond sediment samples did not suggest contamination. Analytes detected were present at levels approximately equivalent to background.

3. PROBLEMS ENCOUNTERED

No problems were encountered during this reporting period.

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#### 4. MITIGATION OF PROBLEMS

See No. 3 above.

#### 5. SCHEDULE

See No. 2 above.

#### 6. ANALYTICAL DATA

Preliminary and partial analytical data were received during this reporting period. These data include the analyses of a background soil sample, of soil samples collected from within each of the four drum groups, of a sample of the garbage bag material, and of two pond sediment samples. No data with regard to drum contents have yet been received.

The background sample was analyzed for Priority Pollutant metals, volatile organic compounds (VOAs), pesticides/PCBs, acid compounds, BNs, total cyanide, and phenol 4-AAP. The following metals and BNs were present above the limit of detection in the background soil sample: arsenic, chromium, copper, lead, mercury, nickel, zinc, di-n-butyl phthalate, butylbenzyl phthalate, and bis (2-ethylhexyl) phthalate. The three BNs may represent a laboratory contaminant. All three analytes were present in a laboratory soil method blank. Total cyanide was present just above the limit of detection, whereas phenol 4-AAP was present at the limit of detection.

Soil samples collected from each of the four drum groups were analyzed for ignitability, corrosivity, and reactivity, and were also analyzed by means of the Toxicity Characteristic Leachate Procedure (TCLP). None of the soil samples were ignitable, corrosive, or reactive. The following metals were detected in the soil samples: barium, cadmium, chromium, lead, and mercury. Only lead, as encountered at drum groups T-1 and T-4, is present above the regulatory limit of 5 parts per million (ppm). No herbicides/pesticides, semi-volatile compounds, or VOAs were present above the limits of detection in any of the four drum group soil samples. PCBs were present significantly above the limits of detection in the soil sample collected from drum group T-4.

The garbage bag sample was analyzed for Priority Pollutant metals, VOAs, pesticides/PCBs, acid compounds, and BNs; for ignitability, corrosivity, and reactivity; by means of TCLP; for total cyanide; and for phenol 4-AAP. The following metals were detected above background levels in the garbage bag sample: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc. Of these, lead was present in the highest concentration (22,000 ppm). No VOAs, pesticides/PCBs, or acid compounds were detected above background levels. The following BNs were detected: naphthalene, phenanthrene, fluoranthene, pyrene, benzo (a) anthracene, bis (2-ethylhexyl) phthalate, chrysene, indeno (1,2,3-cd) pyrene, and benzo (g,h,i) perylene. Phenol 4-AAP was present above the background level. The garbage bag sample was not ignitable, corrosive,

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or reactive. The following metals were detected by TCLP: cadmium and lead. Both metals were present below regulatory limits. No herbicides/pesticides, semi-volatile compounds, or VOAs were detected by this method. ORIGINAL (Red)

The two pond sediment samples were analyzed for Priority Pollutant metals, VOAs, pesticides/PCBs, acid compounds, BNs, total cyanide, and phenol 4-AAP. The following metals were present above the limits of detection: arsenic, cadmium, chromium, copper, mercury, nickel, and zinc. The levels of metals detected were not significantly elevated above CCJM and EPA background levels. No VOAs, pesticides/PCBs, or acid compounds were detected. Three BNs were present above the limits of detection: di-n-butyl phthalate, butylbenzyl phthalate, and bis (2-ethylhexyl) phthalate. All three of these BNs were also detected in the background sample and the laboratory soil method blank. Total cyanide and phenol 4-AAP were not detected.

## 7. MODIFICATIONS

No modifications were made during this reporting period.